abcam

Product datasheet

Anti-Myosin light chain 3 antibody [EPR4160] ab108923

Recombinant RabMAb

2 References 8 Images

Overview

Product name Anti-Myosin light chain 3 antibody [EPR4160]

Description Rabbit monoclonal [EPR4160] to Myosin light chain 3

Host species Rabbit

Tested applications Suitable for: WB, IHC-P

Unsuitable for: Flow Cyt,ICC/IF or IP

Reacts with: Human Species reactivity

Predicted to work with: Mouse, Rat

Immunogen Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.

Positive control human heart muscle lysate, human skeletal muscle lysate; human cardiac muscle tissue, human

skeletal muscle tissue

General notes This product is a recombinant monoclonal antibody, which offers several advantages including:

- High batch-to-batch consistency and reproducibility

- Improved sensitivity and specificity

- Long-term security of supply

- Animal-free production

For more information see here.

Our RabMAb® technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to **RabMAb** patents.

Properties

Form Liquid

Storage instructions Shipped at 4°C. Store at -20°C.

Storage buffer pH: 7.20

Preservative: 0.05% Sodium azide

Constituents: 0.1% BSA, 40% Glycerol (glycerin, glycerine), 9.85% Tris glycine, 50% Tissue

culture supernatant

Purity Protein A purified

Clonality Monoclonal

Clone number EPR4160

Isotype IgG

Applications

The Abpromise guarantee

Our **Abpromise guarantee** covers the use of ab108923 in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
WB		1/1000 - 1/10000. Predicted molecular weight: 22 kDa.
IHC-P		1/100 - 1/250. Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.

Application notes

Is unsuitable for Flow Cyt,ICC/IF or IP.

Target

Function

Regulatory light chain of myosin. Does not bind calcium.

Involvement in disease

Defects in MYL3 are the cause of cardiomyopathy familial hypertrophic type 8 (CMH8) [MIM:608751]. Familial hypertrophic cardiomyopathy is a hereditary heart disorder characterized by ventricular hypertrophy, which is usually asymmetric and often involves the interventricular septum. The symptoms include dyspnea, syncope, collapse, palpitations, and chest pain. They can be readily provoked by exercise. The disorder has inter- and intrafamilial variability ranging from benign to malignant forms with high risk of cardiac failure and sudden cardiac death. CMH8 inheritance can be autosomal dominant or recessive.

Defects in MYL3 are the cause of cardiomyopathy familial hypertrophic with mid-left ventricular chamber type 1 (MVC1) [MIM:608751]. MVC1 is a very rare variant of familial hypertrophic

cardiomyopathy, characterized by mid-left ventricular chamber thickening.

Sequence similarities

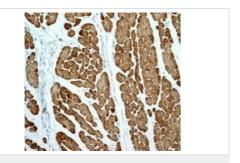
Contains 3 EF-hand domains.

Post-translational modifications

The N-terminus is blocked.

N-terminus is methylated by METTL11A/NTM1.

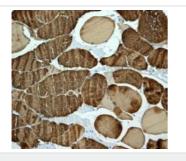
Images



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-Myosin light chain 3 antibody [EPR4160] (ab108923)

Immunohistochemical staining of paraffin-embedded human cardiac muscle using ab108923 at a dilution of 1/100.

Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-Myosin light chain 3 antibody [EPR4160] (ab108923)

Immunohistochemical staining of paraffin-embedded human skeletal muscle tissue using ab108923 at a diltion of 1/100.

Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.



Western blot - Anti-Myosin light chain 3 antibody [EPR4160] (ab108923)

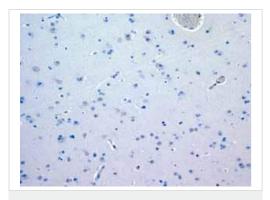
All lanes : Anti-Myosin light chain 3 antibody [EPR4160] (ab108923) at 1/1000 dilution

Lane 1 : human heart muscle tissue lysate

Lane 2 : human skeletal muscle tissue lysate

Lysates/proteins at 10 µg/ml per lane.

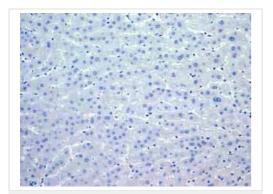
Predicted band size: 22 kDa



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-Myosin light chain 3 antibody [EPR4160] (ab108923)

ab108923 showing negative staining in Normal brain tissue.

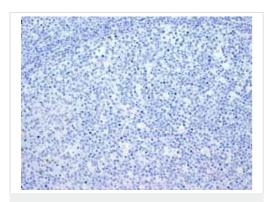
Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-Myosin light chain 3 antibody [EPR4160] (ab108923)

ab108923 showing negative staining in Normal liver tissue.

Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-Myosin light chain 3 antibody [EPR4160] (ab108923)

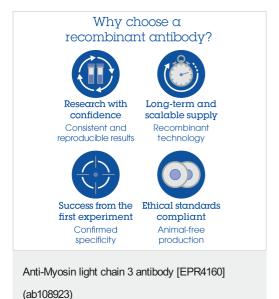
ab108923 showing negative staining in Normal tonsil tissue.

Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.

Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-Myosin light chain 3 antibody [EPR4160] (ab108923)

ab108923 showing negative staining in Normal breast tissue.

Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.



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